1: Gillin E-5 (1932-33)1936 SR9 Carib SR9

000 the investigator can be blamed. If such is the case, he will welcome their being brought to his attention.

* * * * * *

122 I arrived in Georgetown October 26, 1932. Five days of highly organized activity were spent in securing supplies and staff for the expedition. Without the help of the Governor, Sir Edward Denham, and Dr. W. E. Roth, curator of the Georgetown Museum, and many other government officials, arrangements could not have been completed in the short time which was allowed for them. However, on the first of November I departed on the bi-weekly coastal steamer for Marbaruma, accompanied by Cedric Farnum, a guide, Henry Ewing, the cook, and about a ton of provisions and camping equipment. At Marbaruma, the government compound near the mouth of the Barima River, we took possession of a tent boat with outboard motor, furnished by the government, and proceeded up the Waini River and into the lower reaches of the Barama where we secured the services of Alec William, who acted as interpreter and crew foreman throughout the expedition, and six other Carib men who served as boat hands. Delay in the arrival of the rains impeded progress on the river which in low water is blocked by sandbars and fallen logs. During one period of ten days, for instance, we covered a river distance of only eighteen miles. The tent boat was abandoned at Kariako and the rest of the journey up the river, over the falls to Sawari settlement, was accomplished in korials or dugout canoes. Later the journey to the vicinity of the headwaters of the Barama near the Venezuelan frontier was completed by trail.

Rice, flour, salt meat, condiments, medicines, technical equipment, and trade goods were carried. A large part of the provisioning for the party was obtained by hunting and the securing of field products from the Indians. Until Mr. Morgan Hills joined me in February I happened to be the only white man in the Barama country.

133 The drainage basin of the Barama is covered throughout by rather thick jungle of which the mora tree is the most conspicuous feature. Along the river banks the forest averages eighty to a hundred feet in height (Plate 1). The river follows a meandering and convoluted course; its height varies greatly with the rainfall,

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and as far as Bede's the influence of the tide is felt. The surface 133
of the land rises gradually southwestward to the low divide which
marks the Venezuelan frontier. The river country may be divided
into an upper and lower part at the Great Falls at Towakaima,
which have hitherto formed a barrier to tent boat navigation and
consequently to outside penetration of any extent. On the lower
Barama three trading posts or "bush shops" are located, respec-
tively, at Kokerite, Massawini, and Towakaima, serving the In-
dians and the handful of negro prospectors who roam the bush in
search of gold. Throughout the area game and fish are usually [136]
plentiful.

* * * * * * *

I owe thanks in many quarters for personal assistance. Among 122
them, I wish to mention the following: the Division of Anthro-
pology of Harvard University, which financed the expedition;
Professors R. B. Dixon, E. A. Hooton and A. M. Tozzer, who not
only taught me most of the anthropology which I knew before
going to Guiana, but who also advised and encouraged me during
and following the period of field work; His Excellency Sir Edward
Denham, K.B.E., G.C.M.G., at whose invitation the field work in
British Guiana was undertaken and who assisted me in many
ways in both a personal and an official capacity while I was in the
colony; the late Dr. W. E. Roth, who placed the results of his wide
experience and his intimate knowledge of the country as well as
his continued personal efforts freely at my disposal; the Honor-
able John Mullin, Commissioner of Lands and Mines of British
Guiana, who provided me with specially drawn maps from the
archives of his department as well as making arrangements about
tent boat, motor, and camping equipment which were generously
furnished me by the government; Mr. S. Morgan Hills of Hartford,
Connecticut (First Lieutenant, U. S. Army Reserve), whose
hearty companionship enlivened the isolation of the jungle and
who, through his practical knowledge of camp life, relieved me of
much of the detail of expedition management during the last three
months in the field; Alec William, a Carib Indian, an intelligent [115]
interpreter, an expert woodsman and boatman, and a loyal friend;
Henry Ewing, whose appetising menus dispelled the fatigue of
many a hard day and whose loyalty, practical knowledge of bush

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a A portion of the Barama River during the dry season, showing sandbanks and fallen trees which impede navigation.

b, Scene on the Barama River below Bode's. Tidal movements affect the height of the river along the banks of the Barama.

[End plate 1]

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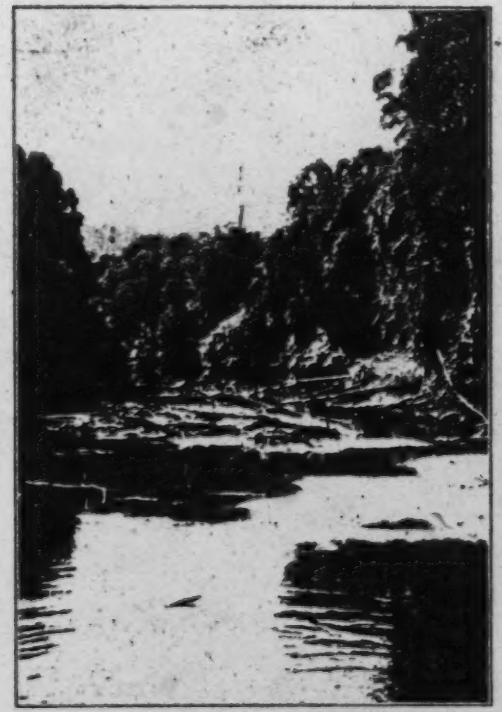
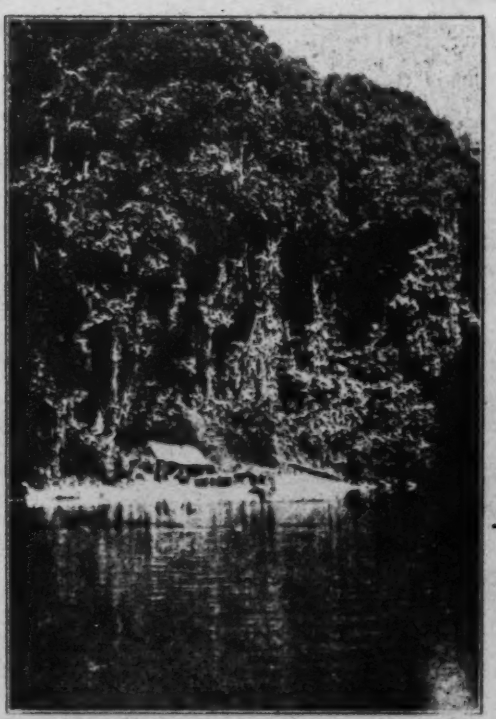


a, View of the Barama River with water at medium height, navigable with some difficulty by small canoes.



b, A typical riverside camp of the expedition, giving an idea of the comparative height of the forest along the banks of the Barama.

End plate 2

1: Gillin E-5 (1932-33) 1936 SR9 Carib SR9

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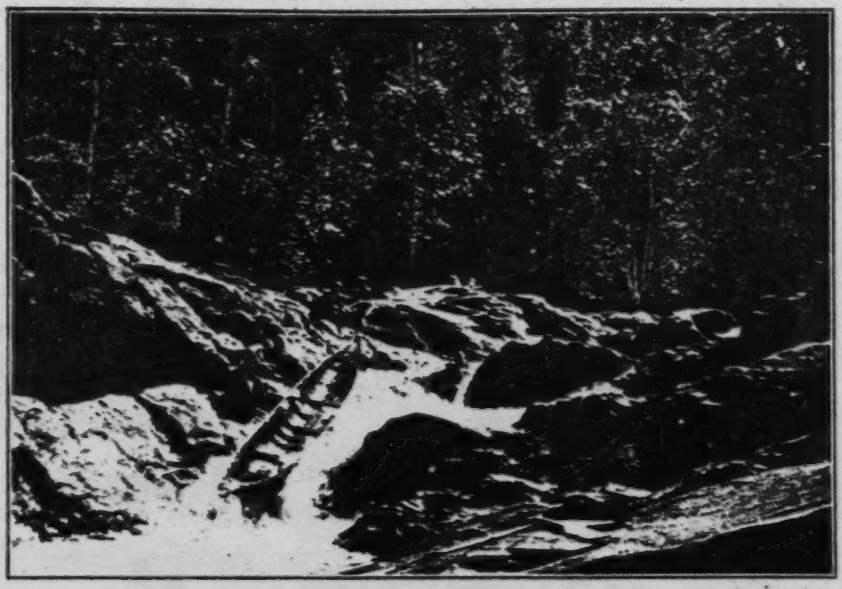

a. A portion of the "Great Falls" of the Barama at Towakaima, an impediment to navigation which has tended to isolate the settlements located above it.

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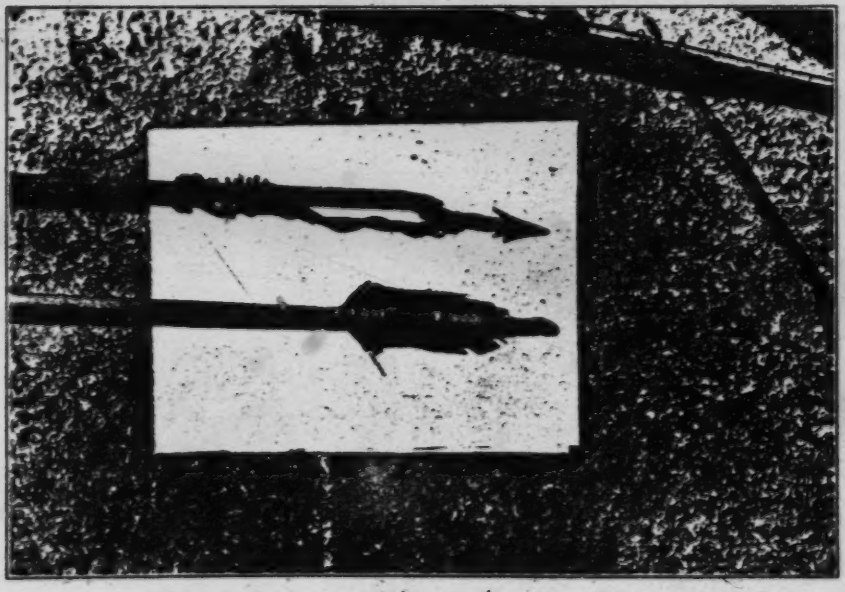

b, Feathering and tip of a harpoon arrow.

[end plate 3]

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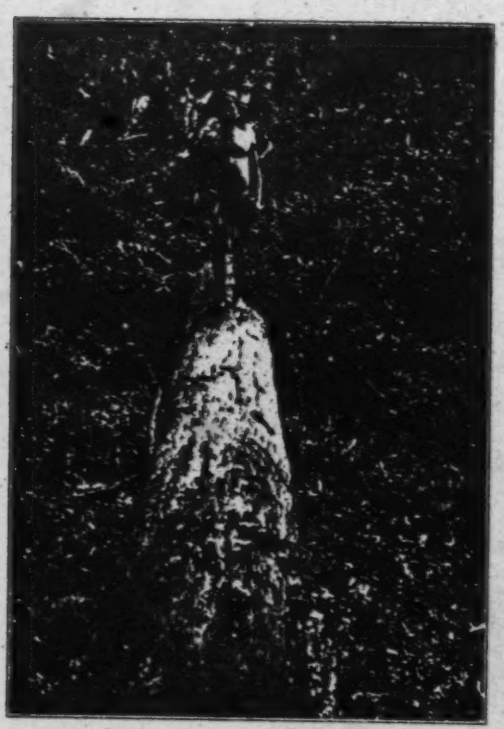

a, Following the trail along a fallen log. The photograph gives some idea of the thick underbrush and gloom of the deep forest.

b, The Carib, Alec William, playing a three-holed flute made from the tibia bone of a deer.

[End plate 26]

II

HISTORY OF REGIONAL CONTACTS AND SUBSISTENCE RESOURCES

131 The headwaters of the Barama River are on the eastern slope of
133 the low divide which marks the Venezuelan frontier. The Barama River, fed by many tributaries, meanders through the rain forest in a generally easterly direction for about 100 miles until it flows into the Waini River. The Great Falls at Towakaima divides the Barama River drainage basin into an upper and a lower section. This report concerns the upper section. Figure 1 is a map of the Barama River in relation to the rest of Guyana. Figure 2 is a more detailed map of the Barama River area.

132 The physical environment of the Upper Barama area remains as
[114] Gillin describes it (1936:xii-xiii). Rainfall fluctuates from year to year, usually accumulating 110 to 120 inches annually (King 1968:
137 148). The drainage basin of the Upper Barama River supports a forest
[133] vegetation with a highest canopy of about 100 feet. The flora is mixed, and species occur in all possible combinations. The tall (35M) mora tree is perhaps the most impressive species (King 1968:22).
132 There is very little terrain that is not inundated by seasonal rain.
133 Bishop reports no high ground suitable for an air strip between Towakaima and the mouth of the Baramita tributary (1941:6).

133 From Baramita mouth to Towakaima, the basin is a wide, flat plain with a gentle gradient (Bishop 1941:8). The Baramita flows

[TEXT CONTINUED ON PAGE 9]

2: Adams E-4, 5 (1970-1971) 1978 SR9 Carib SR9
(1932-1971) Barama River

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Figure 1. Guyana.

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Figure 2. The Barama River.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

133 into the Barama at about 450-500 feet above sea-level and has a diminishing gradient of a little over two feet a mile to the top of the Great Falls which drop eighty to eighty-five feet in a distance of about half a mile (Bishop 1941:7). The plain is interrupted by the outcropping of the gneiss-granite bedrock to form the Frasier Falls. About thirty-five miles above Towakaima, the Frasier series of rapids are about two miles long and present a very small total drop (Bishop 1941:4). The Upper Barama River is fed predominantly by tributaries on its right (south) bank. These tributaries follow the grain of the gneiss-granite bedrock and are mainly blackwater creeks which have a low potential for human exploitation. Such creeks are dark brown in color due to oxygen deprivation caused by decaying vegetable matter which also releases carbonic and humic acids (Meggers 1971:12).

13 Thus, there are three local micro-environments which yield biotic
182 resources for human use. These are the river system, the naturally
241 occurring rain forest, and the man-made fields of cultigens. From these, floral and faunal resources are exploited.

Floral Resources

824 Local vegetable foods are those that occur in the forest and those
241 that are cultivated. However, there is no clear line dividing the two. The slash-and-burn horticulture by which vegetable foods are obtained is a modification of the rain forest. The cultigens are integrated into the forest in a way that they temporarily replace its floral community (Geertz 1963:15-28; Meggers 1971:19-21). From the

at Aranka on the Lower Barama.

All during this early period of gold activities, the river system predominated as the route of transportation and communication. To move down the river was to go toward greater penetration of outside influences. Conversely, the Great Falls at Towakaima remained the gateway to the Upper Barama. However, the Upper Barama is often unnavigable. The water height fluctuates greatly with seasonal rainfall. The low water level exposes numerous fallen trees and impedes or prohibits river travel. Thus, the bush trails that follow along the river course were as important for transportation as the river itself.

There also existed bush trails which ran overland between the Barama River and the Cuyuni River to the south, and the Barima River to the north. During the peak of early gold activities, a government trail connected Towakaima, located on the Barama River, and Arakaka, located on the Barima River. This trail was about twenty-nine miles long, graveled and ditched for use by mule and cart traffic. However, by 1932, this trail had fallen out of use (Gillin 1936:107).

Clearly, the river system was the lodestar of direction used by the early gold seekers. Also, with river travel and bush trails, internal communication and transportation links within this region of the North West District were more developed than links to Georgetown. Later, air travel eclipsed the river as the main artery of communication and transportation. The most immediate links outside the Upper Barama area became those to Georgetown via Timehri Airport. The nature of the material exchanges which flowed along regional networks also changed.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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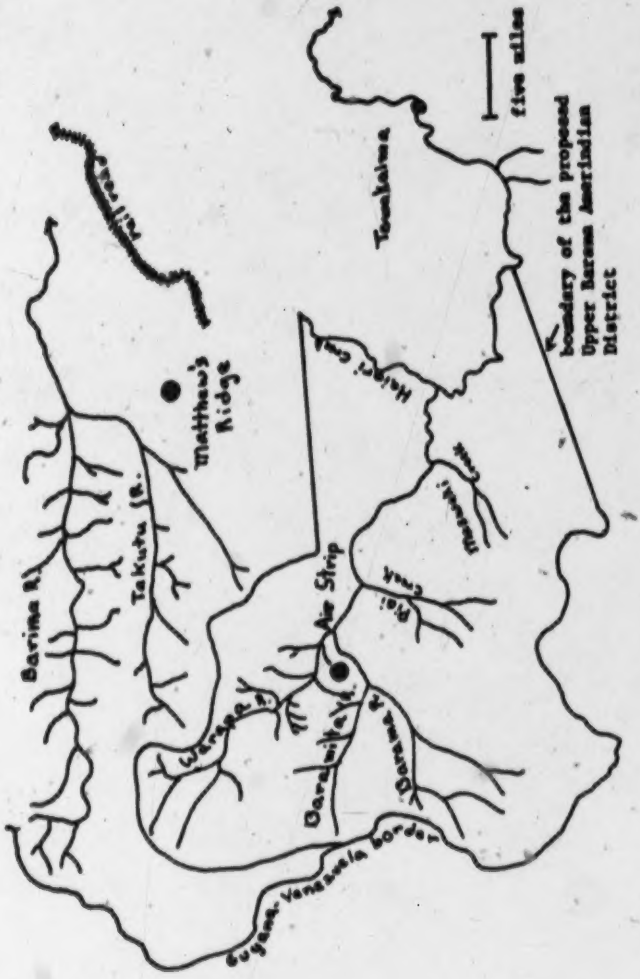

Figure 4. Proposed Amerindian District in the Upper Barama River Area.

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Figure 6. Map of Settlements,* 1932-33 (after Gillin 1936:2).

*Data are not available on the population sizes of these settlements. Individuals in settlements fluctuated between fifteen to fifty in number (Gillin 1934:333).

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2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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Figure 8. Map of Settlements, 1969.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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Figure 10. Map of Settlements, 1970-71.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

121 It would appear that studies of the relationships between popu-
182 lation size and competition for local and external resources in the
*177 process of modernization, as in the case of the Upper Barama River
Caribs, are appropriate in many similar situations throughout the
[131] world. In the Guyanas, which includes the area bounded by the Rio
Negro, Amazon and Orinoco rivers, local Amerindian populations are
• [133] subject to a variety of geographical environments and regional in-
fluences. The geographical areas include coastal, inland mountain-
savannah, and interfluvial rain forest environments (Gillin 1948:800).
Nevertheless, each area is not monolithic regarding the regional in-
fluences of national agencies, missionary groups, and entrepreneural
agents which also generate adaptive strategies on the part of local
populations.

*177 For example, the interfluvial area in which the Upper Barama
182 River Caribs are found is also inhabited by other Amerindian popu-
171 lations, including Caribs, with different adaptations. Along the
184 border between Venezuela and Brazil the Yanomamö (Chagnon 1968)
[101] adapt essentially to the rain forest and engage in warfare, charac-
terized by its attrition, which contributes to the dispersion and
limitation of this population. Although they rely on the European
introduced plantain as the staple crop, they are largely unaffected
by direct external influences. By contrast, the Trio (Rivière 1969),
a Carib speaking group, have been recently nucleated around mission
stations, a Roman Catholic mission in Brazil and two Protestant
missions in Surinam. Carib groups outside the interfluvial area
also add contrast to the adaptations of the Upper Barama River Caribs.